

Notice of Allowability

Application No.

09/479,548

Applicant(s)

SMITS ET AL.

Examiner

Art Unit

Devona E. Faulk

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/27/2006.
2. ☒ The allowed claim(s) is/are 31,44-46,48-52,54-58,66-68.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Response to Arguments

1. The applicant submitted a supplemental response on 4/28/2006 to replace the claims filed on 3/27/2006.
2. Applicant's arguments, filed 3/27/2006, with respect to the 112 rejections of claims 33,34,40,47,52 and 56 have been fully considered and are persuasive. The applicant has amended claims 33,34,40,47,52 and 56 to overcome the 112 rejections set forth in the previous office action.
3. Applicant's arguments, filed 3/27/2006, with respect to the 102 (b) rejection of claims 29-31,33,40,41,43,45,47,51,52 and 62 with respect to the amended claim language have been fully considered and are persuasive. However, a new ground of rejection would have been forth coming for claims 29,21,33,40,41 and 64.
4. Claims 1-28,30,32,34,35,42,43,47,53,59,63 and 65 are cancelled.
5. The applicant agreed to an examiner's amendment to place the case in allowable form.

EXAMINER'S AMENDMENT

6. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Matthew J. Temmerman (Reg. No. 54,487) on 7/6/2006.

The claims are to be amended as follows:

Claims 29,33,36-41 and 60-62,64: CANCEL.

7. Claims 31,44-46,48-52,54-58,66-68 are allowed.

8. The following is an examiner's statement of reasons for allowance:

Regarding claims 31,44,48,52,54-56, prior art Neely (US 5,697,379) discloses a device for hearing evaluation of a subject (Figure 1) comprising:
means for repeatedly delivering an auditory stimulus; means for sampling an EEG response to said stimulus and means for detecting when non-physiological noise (residual noise) is associated with EEG responses and means for automatically determining the amount of said non-physiological noise, and for automatically determining when said amount is excessive relative to a threshold. Neely further teaches of Prior art Thorton et al. (US 4,275,764) teaches of wherein said threshold is derived from normative data. Thorton teaches that a decision is made as to whether the subject is responding by selecting a statistical confidence limit (See abstract), which reads on threshold derived from normative data. Prior art Zoth et al. (US 6,110,126) discloses audiological screening method and apparatus. Prior art Finkenzeller et al. (US 5,954,667) discloses a device for deriving acoustically evoked brain potentials. Prior art Dolphin (US 5,601,091) discloses audiometric apparatus and association screening method. Prior art Finitzo et al. (US 5,003,986) discloses a hierarchial analysis for

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processing brain stem signals to define a prominent wave. Prior art Thorton et al. (US 4,275,744) disclose an auditory response detection method and apparatus. Prior art Bergelson et al. (US 4,493,327) discloses an automatic evoked potential detection. Regarding claim 31, the prior art or combination thereof fails to disclose or make obvious pausing means for pausing the evaluation when said non-physiological amount (noise) is excessive relative to said threshold. Regarding claim 44, the prior art of combination thereof fails to disclose or make obvious wherein said automatically determining that said noise amount is excessive comprising computing a composite signal noise variance and comparing said composite signal noise variance to a predetermined threshold and determining that the composite signal noise variance is greater than said threshold. Regarding claim 48,54,56 the prior art or combination thereof fails to disclose or make obvious whereby determining when said polarity bias is excessive relative to a threshold comprises transforming said digitized EEG response into a series of binary numbers corresponding to the polarity of the amplitude of said EEG response, transforming said binary numbers into an array of polarity sums, determining the bias in said array of polarity sums, and comparing said bias to a predetermined threshold. Regarding claim 52, the prior art or combination thereof fails to disclose or make obvious pausing the step of determining the degree of polarity bias in said EEG. Regarding claim 55, the prior art or combination thereof fails to disclose or make obvious determining if an EEG response contains an ABR waveform by comparing the array of polarity sums against normative data wherein the step of accounting for excessive amounts of said noise comprises rejecting a portion of said

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array of polarity sums. Therefore the prior art or combination thereof fails to disclose or make obvious a device for hearing evaluation, a method for hearing evaluation of a subject and a system for hearing evaluation of a subject as claimed.

9. Claims 45,46,49-51,57,58,66-68 are allowed due to dependency on claims 31,44,48,52,54-56 and 64.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848.

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2615. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DEF


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7/10/06